

ANISIMOV, K.N.; KOLOBOVA, N.Ya.

Research in the field of unsaturated phosphinic acids. Part 20.
Esters of (3-chloro-2-methylbutene-2)-4-phosphinic and (2-methyl-
butadiene-2,3)-4-phosphinic acids. Izv. AN SSSR. Otd. khim. nauk no.
8:927-931 Ag '56. (MLRA 9:10)

1. Institut elementoorganicheskikh soedineniy Akademii nauk SSSR.
(Phosphinic acid)

KOLOBOVA, N. YE., ANISIMOV, K.N., (Inst. Elementary Organ. Compounds AS USSR)

"Research in the Field of Derivatives of Unsaturated Phosphinic Acids" (Issledovaniye v oblasti proizvodnykh nepredel-nykh fosfinovykh kislot)

Chemistry and Uses of Organophosphorous Compounds
(Khimiya i primeneniye fosfororganicheskikh soedneniy),
Trudy of First Conference, 8-10 December 1955, Kazan,
pp. Published by Kazan Affil. AS USSR, 1957
232-242,

Report discussed by A.N. Pudovik (Chem. Inst. im. Acad. A. Ye. Arbuzov, Kazan Aff. AS USSR), G. V. Vinogradov (Inst. of Petroleum im. Acad. S. S. Nametkin AS USSR), B.A. Arbuzov (Chem. Inst. im. Acad. A.Ye. Arbuzov, Kazan Aff. AS USSR)

KOLOBOVA, H. E., and ANISIMOV, K. H. (Institute of Hetero-organic Compounds, Moscow)

"A Study in the Field of Derivatives of Unsaturated Phosphonic Acids,"
Khimiya i Primenenie Fosfororganicheskikh Soyedinenii, pp 232-242, 1957.

SOV/80-59-1-29/44

AUTHORS:

Papok, K.K.; Anisimov, K.N., Zuseva, B.S. and Kolobova, N.Ye.

TITLE:

Effect of Esters of Unsaturated Phosphinous Acids on the Antioxidation Properties of Mineral Oil (Vliyaniye efirov nepredel'nykh fosfinovykh kislot na antiokislitel'nyye svoystva mineral'nogo masla)

PERIODICAL:

Zhurnal prikladnoy khimii, 1959, ³²Nr 1, pp 180-186 (USSR)

ABSTRACT:

Phosphorus-organic compounds improve the properties of lubricating oils. In the present paper the authors describe the effect of esters of unsaturated phosphinous acids on the antioxidizing properties of the MS-20 mineral oil. The evaluation of these properties was performed by the four methods: 1. thermal oxidizing stability, 2. volatility, 3. working fraction and 4. varnish formation (GOST 5737-53), and the results were compiled into tables. Their analysis leads to the following conclusions: 1. The antioxidizing properties of unsaturated phosphinous acid esters are improved: a. with the introduction of the phenyl group in diethyl, diallyl and dihexyl esters; b. with the presence of the indenyl group in diethyl and diallyl esters; c. with an increase in the length of the hydrocarbon radical (from C₂ to C₆) in diallyl and dihexyl esters; d. with an increase in the length of the chain of the ester grouping radical (from C₂ to C₆) in esters of the β -butoxivinyl-

Card 1/2

SOV/80-59-1-29/44

Effect of Esters of Unsaturated Phosphinous Acids on the Antioxidation Properties of Mineral Oil

phosphinous, β -phenylvinylphosphinous and β -hexyloxivinylphosphinous acids. 2. Among the compounds investigated dihexyl esters of unsaturated phosphinous acids possess the highest antioxidizing properties. There are 5 tables and 2 references, 1 of which is Soviet and 1 American.

ASSOCIATION: Institut elementoorganicheskikh soedineniy AN SSSR (Institute of Elemental Organic Compounds of the AS USSR)

SUBMITTED: May 23, 1957

Card 2/2

SOV/80-32-2-22/56

AUTHORS:

TITLE:

Papok, K.K., Anisimov, K.N., Zuseva, B.S., Kolobova, N.Ye.

Effect of Tetraalkyldiamides and Dipiperidides of Unsaturated Phosphine Acids on the Antioxidation Properties of Mineral Oil (Vliyaniye tetraalkildiamidov i dipiperididov nepredel'nykh fosfinovykh kislot na antiokislitel'nyye svoystva mineral'nogo masla)

PERIODICAL:

Zhurnal prikladnoy khimii, 1959, Vol XXXII, Nr 2, pp 358-363 (USSR)

S

ABSTRACT:

The effect of diamides and dipiperidides of unsaturated phosphinic acids on the antioxidizing properties of the oil MS-20 is investigated here. The dipiperidide radical in the compounds increases their antioxidizing property. Phenyl and phenoxy groups increase the antioxidation properties only in tetraethyldiamides, but not in other compounds. The lengthening of the carbon radical in the group $(NR_2)_2$ from C_2 to C_4 reduces anti-oxidation in tetraethyldiamides and tetrabutylidiamides. Tetraalkyldiamides and piperidides of unsaturated phosphinic acids

Card

Card 1/2

5(3)

SCY/60-32-3-33/43

AUTHORS: Papok, K.K., Anisimov, K.M., Zuseva, B.S., Kolobova, N.Ye.

TITLE: The Effect of Thio-Compounds of Unsaturated Phosphinic Acids on the Anti-Oxidation Properties of Mineral Oil (Vliyaniye tiosoyedineniy nepredel'nykh fosfinovykh kislot na antiokislitel'nyye svoystva mineral'nogo masla)

PERIODICAL: Zhurnal prikladnoy khimii, 1959, Vol XXXII, Nr 3, pp 656-659 (USSR)

ABSTRACT: The effect of the dithioethyl ethers of unsaturated phosphinic and thiophosphinic acids and of the ethers of alkylthiovinylphosphinic acids on the antioxidation properties of the oil MS-20 is investigated here. The best result is obtained with the dithioethyl ether of the β -ethoxyethoxyvinylphosphinic acid. The introduction of sulfur into the ethers of unsaturated phosphinic acids increases their antioxidation properties sharply. The ethers of alkylthiovinylphosphinic acids have no effect on the stability against thermal oxidation.

Card 1/2

307/80-32-3-33/43

The Effect of Thio-Compounds of Unsaturated Phosphinic Acids on the Anti-Oxidation Properties of Mineral Oil

There are 2 tables and 2 Soviet references.

SUBMITTED: December 17, 1957

Card 2/2

S/062/61/000/001/006/016
B101/B220

AUTHORS: Slovkhotova, N. A., Anisimov, K. N., Kunitskaya, G. M.,
and Kolobova, N. Ye.

TITLE: Infra-red spectra of some derivatives of unsaturated
phosphinic acids

PERIODICAL: Izvestiya Akademii nauk SSSR. Otdeleniye khimicheskikh nauk,
no. 1, 1961, 71-76

TEXT: The purpose of the present paper was to verify the structural
formulas of various previously (Ref.) synthesized derivatives of unsaturat-
ed phosphinic acids based on their infra-red spectra, as well as to study
the mutual influence of atoms and groups inside their molecules. The
spectra were taken by means of a Hilger D-209 (D-209) infra-red spectro-
meter. A table indicates those absorption bands from which conclusions
were drawn as to the structure of the analyzed substances. In detail, the
following has been found: The chlorine atom bound to the C-atom neigh-
boring the C=C bond (ester II) increases the frequency of stretching
vibrations of the C=C bond. The absorption bands $870-910\text{ cm}^{-1}$ correspond-

Card 1/5

Infra-red spectra of some derivatives...

S/062/61/000/001/006/016
B101/B220

ing to deformation vibrations of the CH group at the C=C bond confirm the existence of vinyl groups in IV and of vinylidene groups in I, II, III. The shift of these bands in II is also attributed to the neighboring chlorine atom. In relation to IV where the phosphorus group is not conjugated with the C=C group, frequency in V is reduced by 40 cm^{-1} . Since, however, the P=O group, due to its different configuration, cannot be located in the same plane as the C=C group, this effect is attributed to the phosphorus atom. In the esters VII to IX, a similarity with the spectra of pentadiene and isoprene was found in the range

$1640\text{--}1585\text{ cm}^{-1}$, which is attributed to the corresponding bands of symmetrical and antisymmetrical vibrations of the conjugate double bonds. The band shift is attributed to the neighboring phosphorus atom. All compounds show intensive bands in the range $1250\text{--}1270\text{ cm}^{-1}$; these bands correspond to the P=O bond, and in the case of acid chlorides, they are shifted by 20 cm^{-1} toward higher frequencies, owing to the action of the chlorine atoms. The intensive doublet bands $1060\text{--}1000\text{ cm}^{-1}$ are attributed to vibrations of the O-C bond in the P-O-C groups. There are 3 figures, 1 table, and 10 references: 3 Soviet-bloc and 8 non-Soviet-bloc.

Card 2/5

Infra-red spectra of some derivatives...

S/062/61/000/001/006/016
B101/B220

ASSOCIATION: Fiziko-khimicheskiy institut im. L. Ya. Karpova
(Physicochemical Institute imeni L. Ya. Karpov).
Institut elementoorganicheskikh soedineniy Akademii nauk
SSSR (Institute of Elemental-organic Compounds, Academy
of Sciences USSR)

SUBMITTED: July 23, 1959

Card 3/5

36641

S/062/62/000/004/011/013
B110/B101

5.3630

AUTHORS:

Kolobova, N. Ye., and Anisimov, K. N.

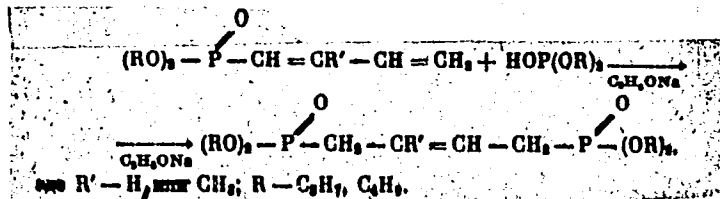
TITLE:

Addition of dialkyl phosphoric acids to the esters of butadienyl and isoprenyl phosphinic acids

PERIODICAL:

Akademiya nauk SSSR. Izvestiya. Otdeleniye khimicheskikh nauk, no. 4, 1962, 726 - 727

TEXT: The addition of dialkyl phosphoric acids to the esters of butadienyl and isoprenyl phosphinic acids, described by the authors (Izv. AN SSSR Otd. khim. n. 1956, 923, ibid., 1956, 927), has been investigated. ~~Exo-~~ thermic addition in 1,4-position takes place in the presence of alkali alcoholate:



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Addition of dialkyl phosphoric acids ...

S/062/62/000/004/011/013
B110/B101

Products: n-tetrapropyl- (I), isotetrapropyl- (II), and n-tetrabutyl ester (III) of 2-butene-1,4-diphosphinic acid, as well as n-tetrapropyl- (IV) and n-tetrabutyl ester (V) of 2-methyl-2-butene-1,4-diphosphinic acid. Yields: I = 64, II = 47, III = 64, IV = 45, V = 85%; boiling points: I = 205-207.5 (1.5), II = 195 (2), III = 211.5-212.5 (1), IV = 201-202 (0.5), V = 220-222 (1 mm Hg); refractive indices: I = 1.4545, II = 1.4513, III = 1.4560, IV = 1.4586, V = 1.4572; densities (d_4^{20}): I = 1.1026, II = 1.0872,

III = 1.0487, IV = 1.0554, V = 1.0287. Catalysts: sodium propylate for I, sodium isopropylate for II, sodium butylate for III, sodium propylate for IV, and sodium butylate for V. There is 1 table.

ASSOCIATION: Institut elementoorganicheskikh soedineniy Akademii nauk SSSR (Institute of Elemental Organic Compounds of the Academy of Sciences USSR)

SUBMITTED: October 16, 1961

Card 2/2

ANISIMOV, K.N.; KOLOBOVA, N.Ye.

Synthesis of tert.but./cyclopentadienyl manganese tricarbonyl
and its derivatives. Izv.AN SSSR Otd.khim.nauk no.4:721-722
Ap '62. (MIRA 15:4)

1. Institut elementoorganicheskikh soedineniy AN SSSR.
(Manganese organic compounds)

NESMEYANOV, A.N.; ANISIMOV, K.N.; KOLOBOVA, N.Ye.

Some chemical properties of butadiene iron tricarbonyl. Izv. AN
SSSR Otd.khim.nauk no.4:722-724 Ap '62. (MIRA 15:4)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.
(Iron organic compounds)

KOLOBOVA, N.Ye.; ANISIMOV, K.N.

Addition of dialkylphosphorous acids to esters of butadienyl-
and isoprenylphosphinic acids. Izv.AN SSSR Otd.khim.nauk no.4:
726-727 Ap '62. (MIRA 15:4)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.
(Phosphorous acid) (Phosphinic acid)

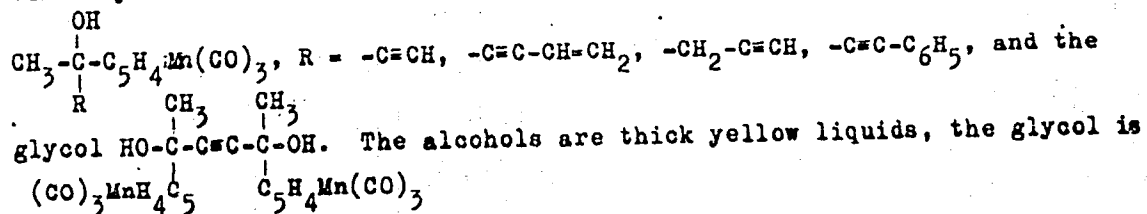
S/062/62/000/011/013/021
B101/B144

AUTHORS: Nesmeyanov, A. N., Anisimov, K. N., Kolobova, N. Ye., and
Magomedov, G. K.

TITLE: Reaction of acetyl cyclopentadienyl manganese tricarbonyl with
Grignard reagent and with Iotsich complex

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Otdeleniye khimicheskikh
nauk, no. 11, 1962, 2072 - 2073

TEXT: Reaction of acetyl cyclopentadienyl manganese tricarbonyl with the
corresponding Grignard reagents and with the Iotsich complex produced
tertiary alcohols of acetylenes with the general structure



Card 1/2

Reaction of Acetyl...

S/062/62/000/011/013/021
B101/B144

crystalline. The structures of the synthesized compounds were confirmed by the IR spectra. The relevant data will be published later. Compounds obtained: 2-hydroxy-2-cyclopentadienyl-manganese-tricarbonyl-butyne-3, yield 81%, b.p. $27^{\circ}\text{C}/10^{-2}$ mm Hg, n_D^{20} 1.5912, d_4^{20} 1.4131; 2,5-dihydroxy-2,5-bis-(cyclopentadienyl-manganese-tricarbonyl)-hexyne-3, m.p. $142 - 143^{\circ}\text{C}$ without decomposition, yield 40%; 2-hydroxy-2-cyclopentadienyl-manganese-tricarbonyl-4-phenyl-butyne-3, yield 71%, b.p. $70^{\circ}\text{C}/10^{-2}$ mm Hg, n_D^{20} 1.6238, d_4^{20} 1.3386; 2-hydroxy-2-cyclopentadienyl-manganese-tricarbonyl-hexen-5-yne-3, yield 90%, b.p. $80^{\circ}\text{C}/10^{-2}$ mm Hg, n_D^{20} 1.5945, d_4^{20} 1.3307; 2-hydroxy-2-cyclopentadienyl-manganese-tricarbonyl-pentyne-4, yield 63%, b.p. $40^{\circ}\text{C}/10^{-4}$ mm Hg, n_D^{20} 1.5850, d_4^{20} 1.3635. ✓

ASSOCIATION: Institut elementoorganicheskikh soedineniy Akademii nauk SSSR
(Institute of Elemental Organic Compounds of the Academy of Sciences USSR)

SUBMITTED: June 4, 1962
Card 2/2

ANISIMOV, K.N.; KOLOBOVA, N.Ye.

Chlorides of unsaturated acids. Izv. AN SSSR. ^Utd. khim. nauk
no. 3:442-443 Mr '62. (MIRA 15:3)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.
(Phosphinous chloride)

ANISIMOV, K.N.; KOLOBOVA, N.Ye.

Addition of phenyltetrachlorophosphine to ethyl vinyl ether and the transformation of the adduct into various derivatives of β -ethylvinylphenylphosphinic and β -ethylvinylphenylphosphinous acids. Izv.AN SSSR.Otd.khim.nauk no.3:444-448 Mr '62. (MIRA 15:3)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.
(Ethers) (Phosphinic acid) (Phosphinous acid)

KOLOBOVA, N.Ye.; ANISIMOV, K.N.

Addition of alkyl mercaptans to the esters of butadienyl- and isoprenylphosphinic acids. Izv.AN SSSR.Otd.khim.nauk no.6: 1117-1118 '62. (MIRA 15:8)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.
(Thiols) (Phosphinic acid)

S/062/63/000/001/025/025
B101/B186

AUTHORS: Nesmeyanov, A. N., Anisimov, K. N., Kolobova, N. Ye., and
Kolomnikov, I. S.

TITLE: Manganese rhenium decacarbonyl $(CO)_5Mn-Re(CO)_5$

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Otdeleniye khimicheskikh
nauk, no. 1, 1963, 194

TEXT: Reaction of sodium pentacarbonyl manganese with rhenium pentacarbonyl
chloride, or of sodium pentacarbonyl rhenium with manganese pentacarbonyl
bromide, in tetrahydrofuran produced the hitherto unknown manganese rhenium
decacarbonyl with 60% yield in the form of lemon-yellow crystals, stable
in air, m.p. $167^{\circ}C$, readily sublimable in vacuo, and readily soluble in
organic solvents. The solutions decompose in air. The Mn-Re distance was
found to be $2.96 \pm 0.01 \text{ \AA}$.

ASSOCIATION: Institut elementoorganicheskikh soedineniy Akademii nauk
SSSR (Institute of Elemental Organic Compounds of the Academy
of Sciences USSR)

Card 1/2

NESMEYANOV, A.N.; ANISIMOV, K.N.; KOLOBOVA, N.Ye.; MAGOMEDOV, G.K.

Reaction of (acetylcyclopentadienyl)manganese tricarbonyl with
a Grignard reagent and Ioscesch's "complex." Izv. AN SSSR. Otd.
khim.nauk no.11:2072-2074 N '62. (MIRA 15:12)

1. Institut elementoorganicheskikh soedineniy AN SSSR.
(Manganese compounds) (Grignard reagents)

NESMEYANOV, A. N.; ANISIMOV, K. N.; KOLOBOV, N. Ye.; BARYSHNIKOV, L. I.

New method of synthesizing (cyclopentadienyl) rhenium tri-carbonyl. Izv. AN SSSR. Otd. khim. nauk no.1:193-194 '63.
(MIRA 16:1)

1. Institut elementoorganicheskikh soedineniy AN SSSR.

(Rhenium compounds)

NESMEYANOV, A. N.; ANISIMOV, K. N.; KOLOBOVA, N. Ye.; KOLOMNIKOV, I. S.

Manganese-rhenium decacarbonyl $(CO)_5Mn-Re(CO)_5$. Izv. AN SSSR.
Otd. khim. nauk no.1:194-195 '63. (MIRA 16:1)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.

(Manganese carbonyl)
(Rhenium carbonyl)

ACCESSION NR: AP3009840

S/0062/63/000/007/1348/1350

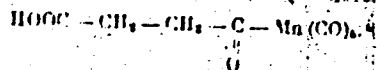
AUTHORS: Nesmeyanov, A. N.; Anisimov, K. N.; Kolobova, N. Ye.

TITLE: Derivatives of pentacarbonyl manganese.

SOURCE: AN SSSR. Izvestiya. Seriya khimicheskaya, no. 7, 1963, 1348-1350.

TOPIC TAGS: H sub 2 SO sub 4, manganese, Beta-carboalkoxy propionic acid, adipic acid, terephthalic acid; tetrahydrofuran, dioxan, pentacarbonyl manganese.

ABSTRACT: Synthesis and properties of new derivatives are reported which were obtained by the reaction of NaMn(CO)_5 with the acid chlorides of Beta-carboalkoxy propionic acids and the acid chlorides of adipic and terephthalic acid in a tetrahydrofuran medium. The following were obtained: Beta-carbo(methoxy, ethoxy, propoxy)-propionylpentacarbonyl manganese, adipinyl-bis and p-phthaloyl-bis (pentacarbonyl manganese). The first 3 compounds were soluble in the usual organic solvents, the last 2 in dioxan. All decomposed in H_2SO_4 . The last compound yielded p-phenylene-bis (pentacarbonyl manganese) upon heating to 120-125°C. Hydrolysis of Beta-carbomethoxypropionylpentacarbonyl manganese yielded the ketoacid



Card 1/2

ACCESSION NR: AP3009840

Bromination of the former gave bromopentacarbonyl manganese and Beta-carbomethoxy-propionyl bromide which hydrolyzed to succinic acid. Infrared spectra were determined in the 1630-1645 and 2000-2140 cm^{-1} range. Upon heating to 100C CO was in- completely liberated (ketone group in the infrared spectrum), while disintegration with formation of $\text{Mn}_2(\text{CO})_{10}$ was observed above 100C, with the exception of the phthaloyl compound. All reactions were conducted in an inert atmosphere. Yields were 75-92%. Orig. art. has: 6 formulas.

ASSOCIATION: Institut elementoorganicheskikh soedineniy Akademii nauk SSSR
(Institute of organo-metallic compounds, Academy of sciences, SSSR).

SUBMITTED: 25Feb63

DATE ACQ: 15Aug63.

ENCL: 00

SUB CODE: CH

NO REF SCV: 000

OTHER: 006

Card 2/2

L 17420-63

EWP(j)/EPF(c)/EWP(q)/EWT(m)/BDS

AFTC/ASD

Pc-4/Pr-4

RM/WH/JD/JW/MAY/JG

ACCESSION NR: AP3004541

S/0078/63/008/008/1806/1808

AUTHORS: Krichevskaya, O. D.; Belozerskiy, N. A.; Segal', L. D.; Kolobova, N. Ya.; Anisimov, K. N.; Nesmeyanov, A. N.

TITLE: Kinetics of thermal decomposition of solid metal carbonyl compounds

SOURCE: Zhurnal neorganicheskoy khimii, v. 8, no. 8, 1963, 1806-1808.

TOPIC TAGS: carbonyl, solid carbonyl, molybdenum, manganese cyclopentadienyl-carbonyl

ABSTRACT: Authors show the dissociation of solid carbonyl compounds: molybdenum carbonyl Mo(CO)_6 and manganese cyclopentadienyltricarbonyl $\text{C}_5\text{H}_5\text{Mn(CO)}_3$. The thermal decomposition of molybdenum carbonyl vapors $\text{Mo(CO)}_6 \rightarrow \text{Mo} + 6\text{CO}$ takes place with an increase of volume six times the original value. A special manometer was used to accurately measure the kinetics of thermal decomposition. It was shown that both reactions of the above compounds follow the first law. The activation energy was calculated from a graph. The value for Mo(CO)_6 was found to be $E = 17.5$ kcal/mole and for $\text{C}_5\text{H}_5\text{Mn(CO)}_3$, $E = 17.9$ kcal/mole. Orig. art. has: 7 figures and 1 table.

ASSN: STATE INSTITUTE FOR NICKEL INDUSTRY PLANNING; INSTITUTE OF ORGANOELEMENTAL COMPOUNDS, ACADEMY OF SCIENCES, SSSR

Card 1/5

NESMEYANOV, A.N.; ANISIMOV, K.N.; KOLOBOVA, N.Ye.

Synthesis of cyclopentadienyl- and methylcyclopentadienyltricarbonyl-manganese. Izv. AN SSSR Ser.khim. no.10:1880 O '63. (MIRA 17:3)

1. Institut elementoorganicheskikh soedineniy AN SSSR.

NESMEYANOV, A.N., akademik; ANISIMOV, K.N.; KOLOBOVA, N.Ye.; ZLOTINA, I.B.

Reaction of cyclopentadienylmanganese tricarbonyl ketones
with Norman's reagent. Dokl. AN SSSR 154 no.4:871-873 F '64.
(MIRA 17:3)

1. Institut elementoorganicheskikh soedineniy AN SSSR.

NESMEYANOV, A.N., akademik; ANISIMOV, K.N.; KOLOBOVA, N.Ye.;
ZLOTINA, I.B.

Reduction of cyclopentadienylmanganese tricarbonyl
ketones and dehydration of secondary alcohols. Dokl.
AN SSSR 154 no.2:391-394 Ja'64. (MIRA 17:2)

1. Institut elementoorganicheskikh soedineniy AN SSSR.

NESMEYANOV, A.N., akademik; ANISIMOV, K.N.; KOLOBOVA, N.Ye.; BARYSHNIKOV,
L.I.

Acylation of cyclopentadienylrhodium tricarbonyl. Dokl. AN SSSR
154 no. 3:646-647 Ja '64. (MIRA 17:5)

1. Institut elementoorganicheskikh soedineniy AN SSSR.

NESMEYANOV, A.N., akademik; ANISIMOV, K.N.; KOLOBOVA, N.Ye.;
KHANDOZHKO, V.N.

Mixed bimetallic organic derivatives of rhenium carbonyl.
Dokl. AN SSSR 156 no. 2 383-385 My '64. (MIRA 17:7)

1. Institut elementoorganicheskikh soedineniy AN SSSR.

NESMEYANOV, A.N., akademik; ANISIMOV, K.N.; KOLOBOVA, N.Ye.; ZAKHAROVA,
M. Ya.

Bimetallic derivatives of the carbonyls of chromium, molybdenum,
and tungsten. Dokl. AN SSSR 156 no. 3:612-615 '64. (MIRA 17:5)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.

NESMEYANOV, A.N.; KOLOBOVA, N.Ye.; ANISIMOV, K.N.; BARYSHNIKOV, L.I.

Sulfonation and mercuration of cyclopentadienyl rhenium carbonyl.
Izv. AN SSSR. Ser. khim. no.6:1134 Je '64.

(MIRA 17:11)

1. Institut elementoorganicheskikh soedineniy AN SSSR.

ACCESSION NR: AP4042882

S/0062/64/000/007/1356/1356

AUTHOR: Nesmeyanov, A. N.; Anisimov, K. N.; Kolobova, N. Ye.

TITLE: Manganese pentacarbonyl derivatives

SOURCE: AN SSSR. Izvestiya. Seriya khimicheskaya, no. 7, 1964, 1356

TOPIC TAGS: manganese pentacarbonyl derivative, furoylmanganese pentacarbonyl, furylmanganese pentacarbonyl

ABSTRACT: In a continuation of research on derivatives of manganese pentacarbonyl, a new compound, 2-furoylmanganese pentacarbonyl, has been prepared. Synthesized from 2-furoyl chloride and manganese sodium pentacarbonyl in quantitative yield, it is light yellow, insoluble in water, and soluble in organic solvents, with mp = 72—73C. On melting, it liberates one molecule of CO to form 2-furylmanganese pentacarbonyl, with bp = 28C (10⁻³ mm Hg). Orig. art. has: 2 formulas.

Card 1/2

ANISIMOV, K.N.; KOLOBOVA, N.Ye.; MAGOMEDOV, G.K.; DVORYANTSEVA, G.G.

Ethers of 2-hydroxyhexen-5-yn-3-yl-2-cyclopentadienylmanganese
tricarbon-1. Izv. AN SSSR Ser. khim no.7:1320-1322 J1 '64.
(MIRA 17:8)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.

NESMEYANOV, A.N.; ANISIMOV, K.N.; KOLOBOVA, N.Ye.; ZLOTINA, I.B.

Homologs of cyclopentadienylmanganese tricarbonyl. Izv.
AN SSSR Ser. khim. no.7:1326-1327 J1 '64.

(MIRA 17:8)

1. Institut elementoorganicheskikh soedineniy AN SSSR.

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NESMEYANOV, A.N.; ANISIMOV, K.N.; KOLOBOVA, N.Ye.

Derivatives of manganese pentacarbonyl. Izv. AN SSSR Ser. khim.
no.7:1356 J1 '64. (MIRA 17:8)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.

Doc ID: AWP(1)/T Po-4/Pr-4 PM 10/2/2220/2220

Compound, thallium compound
Cyclopentadienylmanganese tricarbonyl was isolated in 93% yield from
Cyclopentadienylmanganese tricarbonyl with thallium cyclopentadiene in

ASSOCIATION: Institut Elementcorganicheskikh Akademii
Compounds, Academy of Sciences, SSSR)

ENCL: 00
OTHER: 002

.../.../.../EPF(c)/ENP(j)/T Pc-4/Pr-4 RM

... NR: AP5001606

S/0062:54/000/012/2247/2247

... A. N. ...

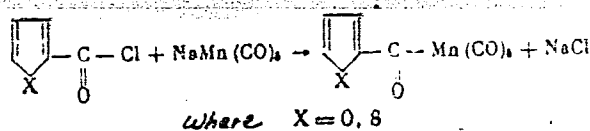
26
25

TITLE: Heterocyclic derivatives of manganese pentacarbonyl

SOURCE: AN SSSR. Izvestiya. Seriya khimicheskaya, no. 12, 1964, 2247

... manganese pentacarbonyl ...
... compounds, manganese pentacarbonyl ...

ABSTRACT: The methylfuroyl-, benzofuroyl-, and thienoyl-manganese pentacarbonyl complexes corresponding decarboxylation products of methylfuroyl-, benzo-



Card 1/2

L 25264-65

ACCESSION NR: AP5001606



Orig. art. has: 1 table and 1 set of equations

ASSOCIATION: Institut elementoorganicheskikh soedineniy Akademii nauk SSSR
(Institute of Organometallic Compounds Academy of Sciences SSSR)

100164

ENCL. 00

513-002-110

NO. OF SOV: 000

OTHER: 000

Card 2/2

NESMEYANOV, A.N., akademik; ANISIMOV, K.N.; KOLOBOVA, N.Ye.; MAGMEDOV, G.K. - I.

Isomerization of 2-hydroxy-4-pentyn-2-yl-cyclopentadienyl-manganesetricarbonyl and 2-hydroxy-2-phenyl-4-methylpentyn-2-yl-cyclopentadienyl-manganesetricarbonyl to the respective enones. Dokl. AN SSSR 158 no.1:163-166
S - 0 '64 (MIRA 17:8)

1. Institut elementoorganicheskikh sovedinaniy AN SSSR.

NESMEYANOV, A.N., akademik; ANISIMOV, K.N.; KOLOBOVA, N.Ye.; BESHCHASTNOV, A.S.

Binuclear derivatives of the carbonyls of molybdenum, manganese,
and rhenium. Dokl. AN SSSR 159 no.2:377-378 N '64. (MIRA 17:12)

1. Institut elementoorganicheskikh soedineniy AN SSSR.

NESMEYANOV, A.N.; KURSANOV, D.N.; SETKINA, V.N.; KISLYAKOVA, N.V.; KOLOBOVA,
N.Ye.; ANISIMOV, K.N.

Isotopic exchange of hydrogen atoms in cyclopentadienyl rhenium tricarbonyl.
Izv. AN SSSR. Ser. khim. no.4:762 '65. (MIRA 18:5)

1. Institut elementoorganicheskikh soedineniy AN SSSR.

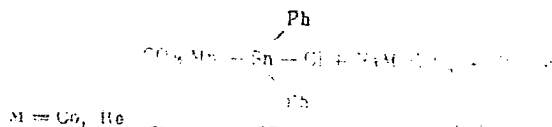
... , A. N. Anisimov, V. N. ... , M. Ya.

... compounds of tin with metal carbonyls

SOURCE: AN SSSR. Izvestiya. Seriya khimicheskaya, no. 6, 1965, 1122

TOPIC TAGS: organotin compound, metal carbonyl

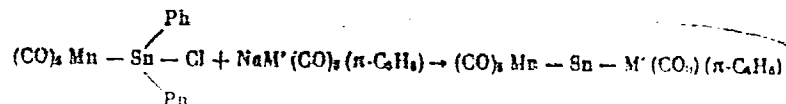
ABSTRACT: The authors obtained new polymetallic compounds of tin with the carbonyls of metals of groups VI, VII, and VIII according to the reaction



Card 1/2

L 59598-65

ACCESSION NR: AP5017968



B

followed by hydrochlorination and the separation of the corresponding halo derivatives, which are tabulated, orig. etc. etc. - 11-10-65

ASSOCIATION: Institut elementoorganicheskikh soyedineniy Akademii nauk SSSR
(Institute of Organometallic Compounds, Academy of Sciences, SSSR)

SUBMITTED: 23Apr65

ENCL: 00

SUB CODE: MM

NO REF SOV: 000

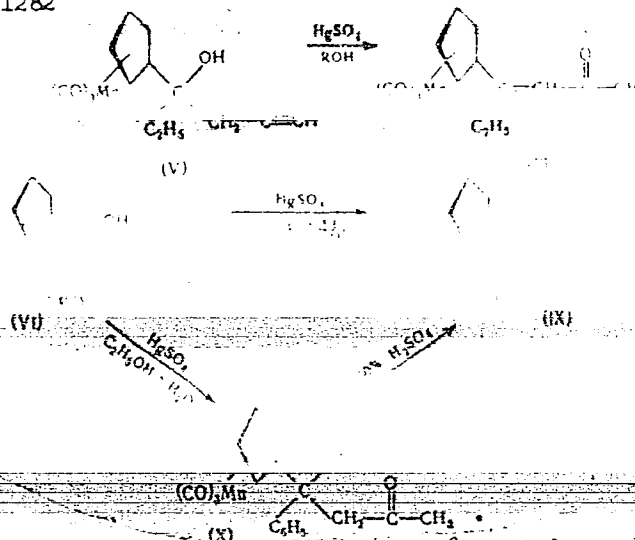
OTHER: 000

Card 2/2

1 64451-00

EnI(B)/EnI(C)/EnI(D) = 1.000 -

ACCESSION NR: AP5021282



It is concluded that the isomerization of tertiary β -acetylene alcohols represents a rearrangement, the first stage of which is the heterolysis

10/10/80

Chemical Equations.

ASSOCIATION: Institut elementoorganicheskikh soedineniy. Akad. Nauch. SSSR
Sovetskaya Rossiya, Leningrad.

10/10/80

ENCL: 00

SUB CODE: 00
SC

Card 3/3

NESMEYANOV, A.N.; ANISIMOV, K.N.; KOLOBOVA, N.Ye.; ANTONOVA, A.B.

Reaction of manganese chloropentacarbonyl with trichlorogermene. Izv.
AN SSSR. Ser. khim. no.7:1309 '65. (MIRA 18:7)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.

NESMEYANOV, A.N.; MAGOMEDOV, G.K.; KOLOBOVA, N.Ye.; ANISIMOV, K.N.

Condensation of acetylcyclopentadienylmanganese tricarbonyl
into 2-butenon-4yl-2,4-biscyclopentadienylmanganese tricarbonyl.
Izv. AN SSSR. Ser. khim. no.8:1496-1497 '65. (MIRA 18:9)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.

ANISIMOV, K.N.; KOLOBOVA, N.Ye.; MAGOMEDOV, G.K.-I.

Synthesis and isomerization of

4-hydroxy-4-methyl-2-heptynyne-6-yl-2-cyclopentadienyl-

manganesetricarbonyl. Dokl. AN SSSR 165 no.4:817-820 D '65.
(MIRA 18:12)

1. Institut elementoorganicheskikh soyedineniy AN SSSR. Submitted April 26, 1965.

NESMEYANOV, A.N.; ZAYTSEV, V.A.; ANISIMOV, K.N.; LERNER, M.O.;
KOLOBOVA, N.Ye.; PORETSKAYA, A.P.; MAGOMEDOV, G.K.

Antidetonating effectiveness of some organic compounds of
manganese. Neftekhimiia 5 no.6:892-896 N-D '65.

(MIRA 19:2)

1. Institut elementoorganicheskikh soyedineniy AN SSSR. Submitted
Nov. 12, 1964.

NESMEYANOV, A.N.; ANISIMOV, K.N.; KOLOBOVA, N.Ye.; ANTONOVA, A.B.

Phenylgermanium derivatives of manganese carbonyl. Izv. AN SSSR.
Ser.khim. no.1:160-162 '66. (MIRA 19:1)

1. Institut elementoorganicheskikh sovedineniy AN SSSR. Submitted
May 14, 1965.

NESMEYANOV, A.N.; KOLOBOVA, N.Ye.; ANISIMOV, K.N.; KHANDOZHKO, V.N.

Phenylgermanium and phenyltin derivatives of rhenium carbonyl.
Izv.AN SSSR. Ser.khim. no.1:163-164 '66.

(MIRA 19:1)

1. Institut elementoorganicheskikh soyedineniy AN SSSR. Submitted May 14, 1965.

10644-66 EWT(m)/I WE/RM
 ACC NR: AP6002075
 SOURCE CODE: UR/0204/65/005/006/0892/089-
 AUTHOR: Nesmeyanov, A. N.; Zaytsev, V. A.; Anisimov, K. N.; Lerner, M. O.; Kolobova, N. Ye.; Poretskaya, A. P.; Magomedov, G. K.
 ORG: Institute of Heterorganic Compounds AN SSSR (Institut elementoorganicheskikh soedineniy AN SSSR)
 TITLE: Antiknock effectiveness of certain organomanganese compounds
 SOURCE: Neftekhimiya, v. 5, no. 6, 1965, 892-896
 TOPIC TAGS: antiknock compound, organomanganese compound, fuel additive
 ABSTRACT: The antiknock effectiveness of manganese carbonyl (MC) and of cyclopentadienyltricarbonylmanganese⁷(CTM) derivatives was compared with that of CTM and tetraethyllead (TEL). The effectiveness of the individual organomanganese compounds in different concentrations was studied in various fuels by the standard motor method for determining the octane number. It was shown that for a given metal content in the fuel: 1) the antiknock effectiveness of MC in comparison with that of CTM and TEL is as follows: a) In automotive gasolines A-66 and A-72, lower; b) in a mixture of isooctane (60%) and heptane (40%), nearly the same; c) in the aviation gasoline B-95/130, lower. 2) The antiknock effectiveness of MC-CTM mixture in B-95/130 gasoline is equal to that of CTM. 3) The antiknock effectiveness of 2[2-(alkoxy)-5-hexen-3-ynyl]cyclopentadienyltricarbonylmanganese depends on the alkoxy group and
 UDC: 547.514.72:171.1:665.521.23
 Card 1/2

L 10644-66.

ACC NR: AP6002075

drops in the sequence $-\text{OC}_2\text{H}_5 > -\text{OC}_3\text{H}_7 > -\text{OCH}_2-\text{CH}=\text{CH}_2 > -\text{OCH}_3 > -\text{OC}_4\text{H}_9$.
 2[2-(Ethoxy)-5-hexen-3-ynyl]cyclopentadienyltricarbonylmanganese improves the octane
 rating by two numbers as compared with CTM. 4) Introduction of acyl or benzoyl
 groups into the CTM molecule lowers its antiknock effectiveness. Orig. art. has:
 1 fig. and 6 tables. [BO]

SUB CODE: 21/ SUBM DATE: 12Nov64/ ORIG REF: 003/ OTH REF: 002/ ATD PRESS:
 4169

Card 2/2

L 27094-66 EWT(m)/EWP(j) RM

ACC NR: AP6017399

SOURCE CODE: UR/0062/65/000/007/1309/1309

AUTHOR: Nesmeyanov, A. N.; Anisimov, K. N.; Kolobova, N. Ye.; Antonova, A. B. 40
B

ORG: Institute of Organoelemental Compounds AN SSSR (Institut elementoorganicheskikh sovedineniy AN SSSR)

TITLE: Reaction of manganese chloropentacarbonyl with trichlorogermanium

SOURCE: AN SSSR. Izvestiya. Seriya khimicheskaya, no. 7, 1965, 1309

TOPIC TAGS: manganese compound, germanium compound, IR spectrum, absorption band

ABSTRACT: Bimetallic compounds of carbonyls of transition metals with group IV metals are obtained by reaction of the sodium salt of the metal carbonyl with the halogenide derivative of a group IV metal. The authors carried out a new reaction of manganese chloropentacarbonyl with trichlorogermanium for the series of metal carbonyls: $\text{Cl}_3\text{GeH} + \text{ClMn}(\text{CO})_5 \rightarrow \text{Cl}_3\text{GeMn}(\text{CO})_5 + \text{HCl}$. The reaction was carried out in tetrahydrofuran with gradual rise in temperature from 20 to 60°C during the course of one hour. The manganopentacarbonyl-trichlorogermanium, obtained with a 40% yield, is a white crystalline compound with b. p. 168.5 - 169°C, insoluble in water, soluble in petroleum ether, benzene, and other organic solvents, sublimating in vacuum, and stable in air. The infrared spectrum of the compound contained intensive absorption bands in the region characteristic of carbonyl groups bound with metal, 2030 and 2130 cm^{-1} ; bands were present in the region of 400 and 453 cm^{-1} , corresponding to Ge-Cl bonds in compounds with the GeCl_3 groupings. Orig. art. has: 1 formula. [JPRS] 2

SUB CODE: 07, 20 / SUBM DATE: 23Apr65 / ORIG REF: 002

Card 1/1

UDC: 661.668+546.711/717

L 36986-66 EWP(j)/EWT(m) RM

ACC NR: AP6008509

SOURCE CODE: UR/0062/66/000/001/0160/0162

AUTHOR: Nesmeyanov, A. N. / Anisimov, K. N. / Kolobova, N. Ye. / Antonova, A. B.ORG: Institute of Heteroorganic Compounds, Academy of Sciences SSSR (Institut elementoorganicheskikh soyedineniy Akademii nauk SSSR)TITLE: Phenylgermanium derivatives of manganese carbonyl

SOURCE: AN SSSR. Izvestiya. Seriya khimicheskaya, no. 1, 1966, 160-162

TOPIC TAGS: manganese compound, phenyl compound, germanium compound, chemical synthesis, organogermanium compound

ABSTRACT: This investigation is devoted to the synthesis of phenylgermanium derivatives of manganese carbonyl $(C_6H_5)_4-nGeBr_n - nNaMn(CO)_5 \rightarrow (C_6H_5)_4nGe[Mn(CO)_5]_n + nNaBr$, where $n = 1$ or 2 , and to a study of certain of their properties. As a result of the reactions of the sodium salt of manganese carbonyl with halogenated phenylgermanium derivatives, the authors synthesize the bimetallic compounds $(C_6H_5)_3GeMn(CO)_5$, $(C_6H_5)_2Ge[Mn(CO)_5]_2$, and $(C_6H_5)_2(CO)_5MnGe[Mn(CO)_5](C_6H_5)_2$.

By substituting CO-groups into the bimetallic compounds for phosphines,

Card 1/2

UDC: 542.91+547.1'3

L 30956-66

ACC NR: AP6008509

APPROVED FOR RELEASE: 09/18/2001

CIA-RDP86-00513R000823910011-6"

arsines, and stibines, the authors obtain $(C_6H_5)_3GeMn(CO)_4P(C_6H_5)_3$, $(C_6H_5)_3GeMn(CO)_4As(C_6H_5)_3$, and $(C_6H_5)_3GeMn(CO)_4Sb(C_6H_5)_3$.

When halogens act on the phenylgermanium derivatives of manganese carbonyl $(C_6H_5)_2BrGeMn(CO)_5$, $(C_6H_5)_2Br_2GeMn(CO)_5$, $Br_3GeMn(CO)_5$, and $Cl_3GeMn(CO)_5$ are obtained. The authors thank Yu. N. Sheynker and G. G. Dvoryantseva for measuring the infrared spectra.

SUB CODE: 07/ SUBM DATE: 14May65/ ORIG REF: 002/ OTH REF: 003

Card 2/2 BS

L 36987-66 EWP(j)/EWT(m) RM

ACC NR: AP6008510

SOURCE CODE: UR/0062/66/000/001/0163/0164

AUTHOR: Nesmeyanov, A. N.; Kolobova, N. Ye.; Anisimov, K. N.;
Khandozhko, V. N.

42
40
B

ORG: Institute of Heteroorganic Compounds, Academy of Sciences, SSSR (Institut elementoorganicheskikh soyedineniy Akademii nauk SSSR)

TITLE: Phenylgermanium and phenylstannic derivatives of rhenium carbonyl

SOURCE: AN SSSR. Izvestiya. Seriya khimicheskaya, no. 1, 1966, 163-164

TOPIC TAGS: phenyl compound, germanium compound, tin compound, rhenium compound, organotin compound, chemical synthesis, organogermanium compound

ABSTRACT: In this work the authors accomplish the synthesis of compounds with a Ge-Re bond and investigate certain properties of these compounds. Compounds of the type $R_{4-n}Ge[Re(CO)_5]_n$ are produced by the reactions of the appropriate organogermanium halides with the sodium salt of rhenium pentacarbonyl $R_{4-n}GeX_n + nNaRe(CO)_5 \rightarrow R_{4-n}Ge[Re(CO)_5]_n + nNaX$, where $R = C_6H_5$; $X = Br, Cl$; $n = 1, 2$. From this reaction the authors obtained $Ph_3GeRe(CO)_5$ and $Ph_2Ge[Re(CO)_5]_2$ with yields of 87 and 60%, respectively, in the form of colorless crystals stable in air. Both compounds are readily dissolved in polar solvents and in hydrocarbons with heating. By using halides

Card 1/2

UDC: 542.91+547.1'3

L 36987-66

ACC NR: AP6008510

2.

(Br₂), or halogen acids (HCl), the authors synthesized Br₃GeRe(CO)₅ and Ph₂GeRe(CO)₅. In the reaction of PPh₃, AsPh₃, SbPh₃ with Ph₃GeRe(CO)₅ and Ph₃SnRe(CO)₅ the corresponding substitutes are obtained with the general formula Ph₃M-Re(CO)₄L, where M = Ge, Sn; L = PPh₃; AsPh₃; SbPh₃. The authors thank Yu. N. Sheynker and G. G. Dvoryantseva for measuring the infrared spectra.

SUB CODE: 07 / SUBM DATE: 14May65/ ORIG REF: 002 / OTH REF: 000

Card 2/2 *JS*

ACC NR: AP7013161

SOURCE CODE: UR/0062/66/000-012/2246-2246

AUTHOR: Nesmeyanov, A. N.; Anisimov, K. N.; Kolobova, N. Ye.; Denisov, F. S.

ORG: Institute of Heterorganic Compounds, AN SSSR (Institut elementoorganicheskikh soyedineniy AN SSSR)

TITLE: Synthesis of pi-Cyclopentadienyldicarbonylirontrichlorogermane and pi-Cyclopentadienyldicarbonyliron dichlorogermane

SOURCE: AN SSSR. Izvestiya. Seriya khimicheskaya, no. 12, 1966, 2246

TOPIC TAGS: germanium compound, chlorinated organic compound, organic chemical synthesis

SUB CODE: 07

ABSTRACT: pi-Cyclopentadienyldicarbonylirontrichlorogermane (I) was synthesized by the reaction of pi-cyclopentadienyldicarbonyliron chloride with $HGeCl_3$. Compound (I), an air-stable crystalline substance, was also produced in a mixture with pi-Cyclopentadienyldicarbonyliron dichlorogermane (II) in low yield by the action of trichlorogermane upon dimer pi-cyclopentadienyldicarbonyl. The compound (II) was also produced in 85% yield by the reaction of a complex of dioxane and germanium dichloride on dimer pi-cyclopentadienyldicarbonyl.

Cord 1/2

UDC: 542.91 + 547.1'3

ACC NR: AP7013161

Compound (II) is an orange crystalline substance, stable in air. Both (I) and (II) were characterized, and their infrared and nuclear magnetic resonance spectra were taken. Orig. art. has: 1 formula. [JPRS: 40,422]

Card 2/2

KAPUSTINA, L.D.; KOLOBOVA, T.I.; TUMANOVA, G.V.

Experience with a continuous single-process twister
for the manufacture of elastic capron fibers. Khim.volok.
no.5:57-58 '62. (MIRA 15:11)

1. Klinskiy kombinat iskusstvennogo i sinteticheskogo
volokna.

(Nylon)
(Textile machinery)

POPOVA, T.L.; KOLOBOVA, T.I.; SHMEL'KOV, F.I.

Increasing the efficiency of the PKS-2 bobbin rewinding machines. Khim.volok. no.5:74 '62. (MIRA 15:11)

1. Klinskiy kombinat iskusstvennogo i sinteticheskogo volokna.

(Textile machinery)

KOLOBOVA. T.V.; GOLOVANOV, A.A.

Electric conveyor train for factory transportation of semifinished products. Tekst.prem. 15 no.11:45-46 N '55. (MLRA 9:1)

(Conveying machinery)

ALL-BOVA, T.V.

ALL-BOVA, T.V., publisher.

Library organizes technical information, Izobry. y SSSR 2 no. 8:

1954 no. 150.

(Leningrad--Technical libraries)

(MLRA 10:8)

AL'TSHULER, V.Ye., prof.; NIKITINA, L.L., starshiy laborant; KOLOBOVA, V.,
zootekhnik; TIKHOMIROVA, Ye., zootekhnik

Checking standards for the judging of bulls based on various
numbers of daughters. Sbor. nauch. trud. Ivan. sel'khoz. Inst.
no.19:92-100 '62. (MIRA 17:1)

1. Kafedra razvedeniya sel'skokhozyaystvennykh zhivotnykh i
molochnogo dela (zav. - prof. V.Ye. Al'tshuler) Ivanovskogo
sel'skokhozyaystvennogo instituta.

ACC NR: AP6033475

SOURCE CODE: UR/0413/66/000/018/0061/0061

INVENTOR: Novoderezhkin, V. V.; Kolobova, V. I.; Manoim, G. I.; Porshnyakova, Z. S.;
Pucheglazova, I. I.; Izraileva, E. S.

ORG: none

TITLE: Method of producing positive electrodes of dry-charged lead-acid storage
batteries. Class 21, No. 185989

SOURCE: Izobret prom obraz tov zn, no. 18, 1966, 61

TOPIC TAGS: storage battery, battery component, positive electrode, lead oxide,
electrode design

ABSTRACT: An Author Certificate has been issued for a method of producing positive
electrodes by pasting, drying, forming, neutralizing the acid, and hot-air drying
them in multizone continuous-motion dryers. To simplify production technology, the
acid is neutralized during the drying process by lead oxide contained in the active
material. Drying takes place at a temperature up to 200C, with relative air
humidity not over 30%, and with 5—6 m/sec air velocity for 15 to 20 min. Air tem-
perature is then reduced to 100C—120C, and the process is maintained at this
temperature for 5 to 7 minutes.

SUB CODE: 10/ SUBM DATE: 08May65/

Card 1/1

UDC: 621.3.035.23:66.047.3

1. Sherstkov, Ya. A.
KOLOBova, V. N. PHASE 1

PHASE I BOOK EXPLOITATION

SOV/6181

Ural'skoye soveshchaniye po spektroskopii. 3d, Sverdlovsk, 1960. Materialy (Materials of the Third Ural Conference on Spectroscopy) Sverdlovsk, Metallurgizdat, 1962. 197 p. Errata slip inserted. 3000 copies printed.

Sponsoring Agencies: Institut fiziki metallov Akademii nauk SSSR.
Komissiya po spektroskopii; and Ural'skiy dom tekhniki VSNTO.

Eds. (Title page): G. P. Skorniyakov, A. B. Shayevich, and S. G. Bogomolov; Ed.: Gennadiy Pavlovich Skorniyakov; Ed. of Publishing House: M. L. Kryzhova; Tech. Ed.: N. T. Mal'kova.

PURPOSE: The book, a collection of articles, is intended for staff members of spectral analysis laboratories in industry and scientific research organizations, as well as for students of related disciplines and for technologists utilizing analytical results.

COVERAGE: The collection presents theoretical and practical problems of the application of atomic and molecular spectral analysis in controlling the chemical composition of various materials in ferrous and nonferrous metallurgy, geology, chemical industry, and medicine. The authors express their thanks to G. V. Chentsova for help in preparing the materials for the press. References follow the individual articles.

9

Materials of the Third Ural Conference (Cont.)

SOV/6181

Finkel'shteyn, A. I., B. I. Sukhorukov, T. M. Korniyenko,
and Yu. I. Mushkin. Utilization of acid and alkali
properties for spectrophotometric analysis of amino-
hydroxy compounds by means of ultraviolet spectra

168

Finkel'shteyn, A. I. Spectral determination of composi-
tion and structure of melamine pyrolysis products

171

Korobkov, V. S. Spectroscopic manifestations of inter-
molecular hydrogen bonds

174

Kolobova, V. N., and V. V. Zharkov. Quantitative determina-
tion of residual monomers in polystyrene by ultraviolet
absorption spectra

178

Ledentsov, Yu. K., and E. N. Borodina. Absorption spectra
of blood serum under the effect of ionizing radiation
and low temperature

180

Card 13/ 15

VEYTSEY, Yu.I.; KOLOBOVA, Z.A.; STERINA, R.M.

Mechanism of the flocculating action of industrial polyacrylamide.
Nauch. trudy AKKH no.22:19-36 '63. (MIRA 18:5)

S/081/62/000/018/045/059
B160/B186

AUTHORS: Veytser, Yu. I., Kolobova, Z. A.

TITLE: Production of solid polyacryl amide

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 18, 1962, 501,
abstract 18P50 (Sb. nauchn. rabot Akad. kommun. kh-va,
no. 8, 1961, 38-40)

TEXT: C_2H_5OH and $(NH_4)_2SO_4$ were used as coagulators to isolate solid
polyacryl amide (PAA) from 7-9% helium (the purest product is obtained when
using C_2H_5OH). The amount of PAA is calculated so as to obtain a 1%
aqueous-alcoholic or aqueous salt solution of PAA. [Abstracter's note:
Complete translation.]

31
5)

Card 1/1

I 10417-66 EWT(d)/EWT(m)/EWT(w)/EWT(v)/EWT(j)/I/EWT(t)/EWT(k)/EWT(h)/EWT(h)/EWT(l)
 ACC NR: AM5023882 EWA(c) BOOK EXPLOITATION UR
 JD/WM/HM/EM/RM
 Mikhalev, Ivan Ivanovich; Kolobova, Zoya Nikolayevna; Batizat, Viktor Panteleyevich

Technology of the bonding [cementing] of metals (Tekhnologiya skleivaniya metallov)
 1965, 278 p. illus., biblio., Errata slip inserted. 9,550 copies printed.

TOPIC TAGS: adhesive, alloy, steel, bonding material, foam plastic synthetic material

PURPOSE AND COVERAGE: This monograph discusses the technology of bonding various metals to themselves and also to nonmetallic construction materials. Special features involved in devising the methods (a course of action) for the formation of adhesive joints, and the advisability of their use are considered. Principal attention is paid to the selection, preparation, application, heating, and also to the quality control of the starting material and of the resulting joints. The book is intended for the mechanical engineer.

TABLE OF CONTENTS [abridged]:

Foreword -- 3
 Introduction -- 5
 Ch. I. Surface phenomena and adhesion -- 7
 Ch. II. Adhesives for metals and nonmetallic materials -- 34

UDC:621.792

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PROCESS AND PROPERTIES INDEX		25
<p>The influence of natural impurities in cellulose on the susceptibility of a cotton fiber to dyeing. V. A study of the action of sulfuric acid in changes of chemical and physical conditions of cotton. P. P. Viktorov, T. P. Kolobova-Archakova and N. M. Sokolova. <i>J. Applied Chem.</i> (U. S. S. R.) 14, 198-208 (in German, 209) (1941); cf. C. A. 33, 6603^a.—In cotton purification preparatory to bleaching the pectic material must be removed and the fatty and waxy materials retained. The use of acid boil instead of alkali boil has been adopted by several manufacturing plants (in U. S. S. R.) and the present work was done for the purpose of studying effects of such a treatment on the properties of cotton fibers. Cotton thread was boiled under reflux with 40 times its wt. of soln., then washed with hot distd. H₂O. Acid concns. used were 0, 2, 1, 0.5, and 0.25 g./l. H₂SO₄. Time of the treatment was varied between 1 and 4 hrs. Boiling for 4 hrs. with acid of concn. 0.5 g./l. decreased (a) the N content to 0.12% from 0.24%, (b) fatty and waxy substances to 0.38% from 0.02%, (c) pectic matter (calcd. as Ca pectate) to 0.007% from 1.06%, (d) ash to 0.22% from 1.32%, and (e) copper number to 0.10 from 0.65. Treatment with NaOH (10 g./l.) gave for (a) 0.097%, (b) 0.22%, (c) 0.04%, (d) 0.24%, (e) 0.145%. The retention of H₂O by the crude fiber is to a large degree due to hygroscopicity of the natural impurities in the fiber. Crude fiber boiled for 4 hrs. in 0.5 g./l. H₂SO₄, in distd. H₂O and in 10 g./l. NaOH, and the original cotton had wettability ratios, resp., of 8.6, 6.4, 8.0, and 3.4. The viscosities of solns. of the various samples in cuprammonium soln. were (in centipoises) 2260, 4103, 2388 and 3118, resp. Higher contents. of H₂SO₄ caused a rapid drop of viscosity, and a corresponding rise of wettability and of copper number. Products of equal wettability can be produced by using 0.25 g./l. acid in presence of wetting agents and by 10 g./l. NaOH in presence of the same agents, with the acid-treated cotton having lower viscosity (1082 vs. 2385). It is concluded that the chem. compn. of acid-treated cotton is essentially the same as that of alkali-treated, and that the physical changes in the fibers are not directly proportional to the removal of noncellulose materials. Increase of substantive-dye adsorption is similar for acid-treated and alkali-treated cotton. Treatment by Schweizer reagent showed that both types of boil cause the loss of the fiber cuticle. When cloth was treated instead of thread, the seed-hull particles remained in the final product, since lignin was not affected by the acid, although the actual bleaching was equally effective as it was in control expts. in which alkali boil was used. Cotton cloth boiled in 0.5 g./l. H₂SO₄ for 4 hrs., then treated with hypochlorite and freed from seed hulls was in no way inferior to alkali-treated material. Running the hypochlorite treatment at 100° with addn. of Na silicate improves whiteness of the cloth and facilitates the removal of the seed hulls, although there is a slight decrease of the tensile strength as compared to hypochlorite treatment at 30-70°. Both hypochlorite treatments give comparable values of viscosity; this indicates absence of chemical degradation by the higher-temp. treatment. The use of a wetting agent, in general, makes the acid treatment more effective.</p>		
G. M. Kosolapoff		

KOLOBOVNIKOV

We are extending socialist competition. Kryl.rod. 8 no.6:3 Je '57.
(KLEA 10:8)

1.predsdatel' Gor'kovskogo oblastnogo komiteta Dobrovol'nogo
obshchestva sodeystviya armii, aviatsii i flotu.
(Aeronautics--Study and teaching)

KOLOBOVNIKOV, A.

Competitions in honor of the October anniversary. Voen.snan. 33
no.10:14 0 '57. (MIRA 10:11)

1. Predsedatel' Gor'kovskogo oblastnogo komiteta Dobrovol'nogo
obshchestva sodeystviya armii, aviatsii i flotu.
(Gorkiy Province--Military education)

KOLOBOVNIKOV, A.

To the aid of the national economy. Voen.znan. 36 no.8:
3-4 Ag '60. (MIRA 13:7)

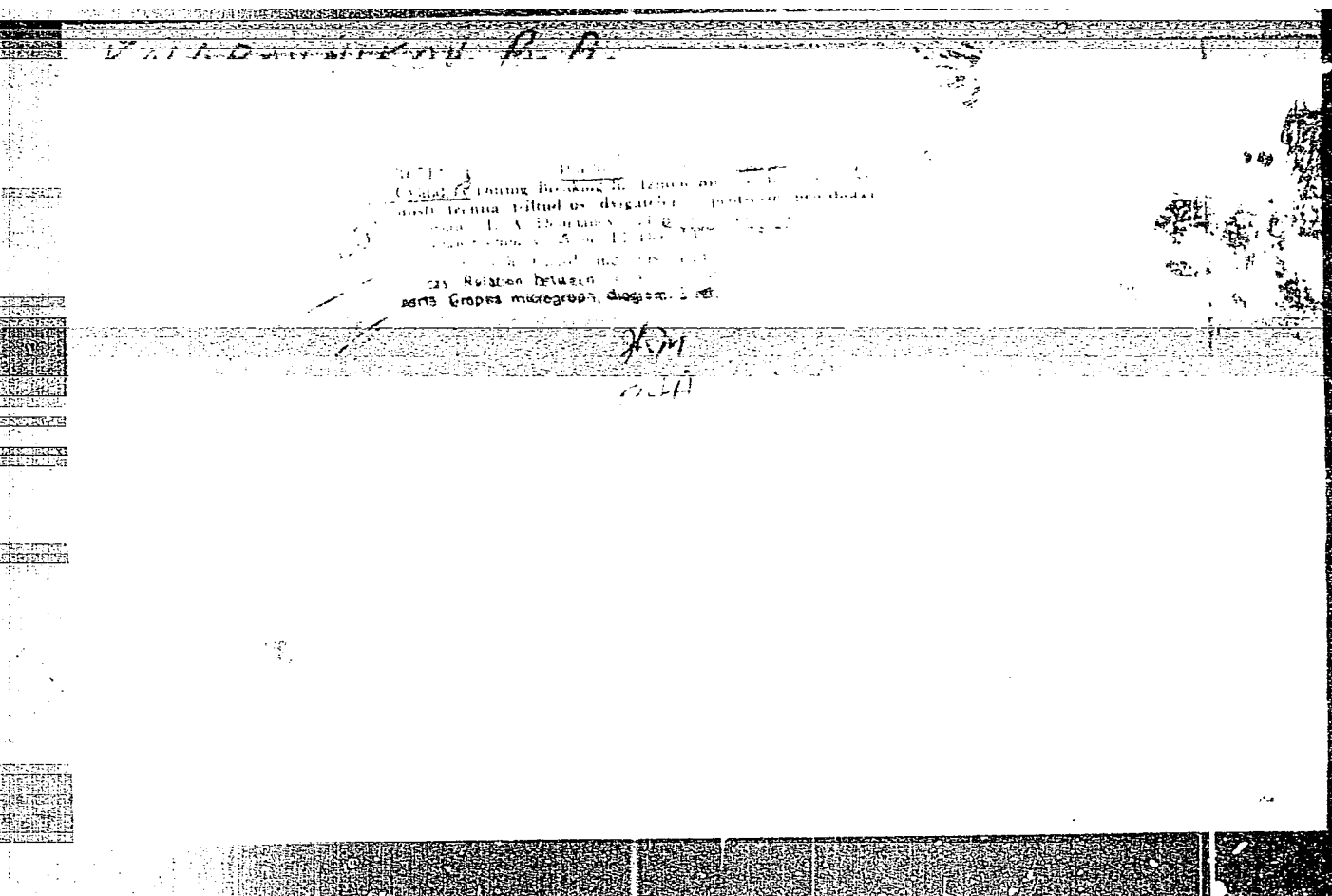
1. Predsedatel' Gor'kovskogo oblastnogo komiteta Dobrovol'nogo
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(Military education)

KOLOBOVNIKOV, A.

Developing community participation. Voem. znan. 39 no.1:20
Ja '63. (MIRA 16:1)

1. Chlen Gor'kovskogo oblastnogo komiteta Dobrovol'nogo
obshchestva sodeystviya armii, aviatsii i flotu.

(Gorkiy Province—Military education)



KOLOBOVNIKOV, I.

Seeding rates for sugar-beet seeds. Sakh.prom. 34 no.3:52
№ '60. (MIRA 13:6)

1. Usinskiy sakharneyy zavod.
(Sugar beets)

KOLOBRODOV, G. L.

23347 Normirovaniye Raboty Krutil'nykh Vaterov. Tekstil. Prom-St', 1949, No. 7,
c. 5-7

SO: LETOPIS NO. 31, 1949

MINAYEV, I.A.; KOLOBRODOV, G.L.

[Work organization and technical standardization in cotton-spinning] Organizatsiia truda i tekhnicheskoe normirovanie v khlopkopriadil'nom proizvodstve. Moskva, Gos. nauchno-tekhn. izd-vo Ministerstva promyshl. tovarov shirokogo potrebleniia, 1953. 300 p.

(MLRA 7:3)
(Cotton spinning)

KOLOBOV, G.L.

Calculation of the number of machines per worker. Izv. vys. ucheb.
sav.; tekhn. tekst. prom. no.3:11-18 '59.

(MIRA 12:11)

1. Institut usovershenstvovaniya rukovodyashchikh i inzhenerno-
tekhnicheskikh rabotnikov Mosoblssovarkhoza.

(Industrial management) (Moscow--Textile industry)

ADILOV, G.; AKOPYAN, A; DASHKOV, K. (g.Kirov); RETSEPTOR, Ya.(g.Moskva);
YESIPENKO, G.; KOLOBRODOV, G. (g.Moskva)

Editor's mail. Sots.trud 4 no.8:134-136 Ag '59.
(MIRA 13:1)

1. Rekomoditel' normirovochnogo punkta pri Agdashskoy Remontno-
tekhnicheskoy stantsii Azerbaydzhanskoy SSR (for Adilov).
2. Inzhener otдела truda Yerevanskogo zavoda (for Akopyan).
3. Zamestitel' nachal'nika otдела kapital'nogo stroitel'stva
treста "Dzerzhinskruka" (for Yesipenko).
(Efficiency, Industrial)

KOLOBOZOV, G.L.

New equipment requires changes in work organization. Izv.vys.ucheb.
zav.; tekhn.tekst.prom. no.2:6-8 '60. (MIRA 13:11)

1. Vsesoyuznyy zaochnyy institut tekstil'noy i legkoy promyshlennosti.
(Textile industry--Management)

KOLOBRODOV, G.I.

Reduction of breakages on spinning machines is a very important condition for increasing labor productivity in spinning. Izv.vyz.ucheb. zav.;tekh.tekst.prom. no.5:3-10 '60. (MIRA 13:11)

1. Vsesoyuznyy nauchnyy institut tekstil'noy i legkoy promyshlennosti.
(Spinning)

KOLOBUTINA, O.M.

Complications in aneurysms of the left ventricle of the heart.
Terap.arkh. 33 no.1:73-79 '61. (MIRA 14:3)

1. Iz kafedry propedevtiki vnutrennikh bolezney (zav. - prof.
A.M. Damir) II Moskovskogo meditsinskogo instituta imeni N.I.
Pirogova.

(HEART—DISEASES)

(ANEURYSM)

SHANINA, V.A.; KOLOBUTINA, O.M.; KOTEL'NIKOVA, G.P. (Moskva)

Comparative evaluation of roentgenokymographic and electrokymographic methods in the diagnosis of cardiac aneurysm. Klin.med. 39 no.4:48-55 '61. (MIRA 14:3)

1. Iz rentgenologicheskogo otdeleniya i otdeleniya funktsional'-noy diagnostiki (zav. V.F. Sysoyev) Gosudarstvennogo nauchno-issledovatel'skogo instituta revmatizma (dir. - prof. A.I. Nesterov) i kafedry propedevтики vnutrennikh bolezney (zav. - prof. A.M. Damir) II Moskovskogo meditsinskogo instituta imeni N.I. Pirogova.

(HEART—RADIOGRAPHY) (ANEURYSMS) (ELECTROKYMOGRAPHY)

KOLOBUTINA, O.M.; SHTYREN, M.Ya., kand.med.nauk

Hemochromatosis. Terap.arkh. no.6:85-88 '61.

(MIRA 15:1)

1. Iz kafedry propedevtiki vnutrennikh bolezney (zav. - prof.
A.M. Damir) II Moskovskogo meditsinskogo instituta imeni N.I.
Pirogova i patologoanatomicheskogo otdeleniya (zav. - prof.
L.Ya. Rapoport) 4-y Gorodskoy klinicheskoy bol'nitsy.
(HEMOCHROMATOSIS)

SHANINA, V.A.; KOLOBUTINA, O.M.; KOTEL'NIKOVA, G.P.

Roentgenelectrokymographic examination in cardiac aneurysms;
preliminary report. Kardiologiya 2 no.3:44-51 My-Je '62.

(MIRA 16:4)

1. Iz rentgenologicheskogo otdeleniya i otdeleniya funktsional'noy
diagnostiki (zav. V.F.Sysoyev) Gosudarstvennogo nauchno-
issledovatel'skogo instituta revmatizma (dir. - prof. A.I.Nesterov)
i kafedry propedevтики vnutrennikh bolezney (zav. prof. A.M.Damir)
II Moskovskogo meditsinskogo instituta imeni N.I.Pirogova.
(ANEURYSMS) (HEART-EXAMINATION) (KYMGRAPHY)

KOLOBUTINA, U.M.

Electrocardiographic investigations in cardiac aneurysm; electrocardio-
graphic and morphological parallels. Terap. arkh. 32 no. 4:30-36 S
'60. (MIRA 14:1)

(CORONARY HEART DISEASE) (ANEURYSMS)

KOLOBUTINA, O.M.; SHANINA, V.A.

Roentgen diagnosis of cardiac aneurysms. Grud. khir. 3 no.2:37-43
'61. (MIRA 14:4)

(HEART—DISEASES)

(ANEURYSM)

KOLOBUTINA, O.M.

Prognosis in cardiac aneurysms. Sov. med. 25 no.5:86-91 My '61.
(MIRA 14:6)

1. Iz kafedry propedevniki vnutrennikh bolezney (zav. - prof.
A.M.Damir) II Moskovskogo gosudarstvennogo meditsinskogo instituta
imeni N.I.Pirogova.

(CARDIAC--ANEURYSMS)

RUSSIA, U. S.

Eye--Accommodation and Refraction

Outline of the evolution of the term "Ocular Refraction." Vest. oft., 30, No. 5, 1951.

9. Monthly List of Russian Accessions, Library of Congress, March 1957, Uncl.

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S/560/61/000/008/010/010
E032/E514

AUTHORS:

Kurnosova, L. V., Kolobyanina, T.N., Logachev, V.I.,
Razorenov, L.A., Sirotkin, I.A. and Fradkin, M.I.

TITLE:

Detection of anomalies in the radiation above the
southern part of the Atlantic Ocean at altitudes
between 310-340 km

PERIODICAL:

Akademiya nauk SSSR, Iskusstvennyye sputniki zemli,
1961, No.8, pp.90-93

TEXT:

The second Soviet satellite carried a counter telescope designed to record the total cosmic ray intensity. This telescope was a part of a more complex device whose function was to record the nuclear cosmic ray component. A brief description of the apparatus was given by S. N. Vernov, V. L. Ginzburg, L. V. Kurnosova, L. A. Razorenov, M. I. Fradkin (Ref.1: UFN, 63, No.1b, 131, 1957). The present paper is concerned only with the anomalously large counting rates obtained while the satellite was passing over certain regions of space. The telescope consisted of two groups of counters with effective areas of 120 and 25 cm². The distance between them was 35.8 cm. The amount of matter between the two groups of counters was about 4 g/cm² (largely perspex).
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Thus, the telescope recorded electrons with energies > 8 MeV and protons with energies > 60 MeV. The particle flux recorded by the telescope was greater than the cosmic ray flux at all the points where the measurements were recorded. In the region of the equator the average flux was $1.2 \text{ particle cm}^{-2} \text{ sec}^{-1}$, while at high altitudes the figure was $3.3 \text{ particle cm}^{-2} \text{ sec}^{-1}$. Another unexpected result was the discovery of regions with anomalously large intensities. Among these regions was that above the southern part of the Atlantic Ocean where on August 19, 1960 there was an increase in the counting rate every time the satellite passed through the region. This is indicated by Fig.1 which shows the counting rate as a function of local Moscow time. The three peaks (1,2,3) correspond to the passage of the satellite through the anomaly. The anomaly lies between 25 and 50° S and 0 and 55° W . A further anomaly was discovered between 50 and 65° S and 30° W and 40° E . A third anomaly was found in the northern hemisphere between 60 and 65° N and 137 and 170° E . It is suggested that the northern anomaly may be associated with the outer radiation belt and is affected by solar flares. The South Atlantic and Southern anomalies may be associated with the existence in the southern

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E032/E514

hemisphere of large negative magnetic anomalies (Ref.4: B. M. Yanovskiy. Zemnoy magnetizm. M., GTTI, 1953), i.e. regions in which the magnetic field strength is lower than the normal field strength. A. J. Dessler (Ref.5: J. Geoph. Res., 64, 713, 1959) has suggested that negative anomalies may act as sinks for the charged particles in radiation belts. V. L. Ginzburg has pointed out to the present authors that T. D. Carr, A. G. Smith and H. Bollhagen (Ref.6: Phys. Rev. Lett., 5, 418, 1960) have discussed the variation in the intensity of radio-waves of Jupiter and have pointed out that the longitude dependence of this intensity becomes understandable if it is assumed that there are magnetic field anomalies on Jupiter. In such regions the charged particle concentration will be enhanced and there will be an increase in the radio emission. This effect may be analogous to the increase in the intensity of radiation in the region of magnetic anomalies reported in the present paper. Acknowledgments are expressed to Professor V. L. Ginzburg and Professor N. A. Dobrozhin for their advice. There are 2 figures and 6 references: 4 Soviet and 2 non-Soviet.

SUBMITTED: December 27, 1960
Card 3/4

ACC NR: AF7005581

SOURCE CODE: UR/0020/67/172/002/0313/0316

AUTHOR: Kabalkina, S. S.; Kolobyanina, T. N.; Vereshchagin, L. F. (Academician)

ORG: Institute of High Pressure Physics, Academy of Sciences, SSSR (Institut fiziki vysokikh davleniy Akademii nauk SSSR)

TITLE: X ray diffraction investigation of the crystal structure of iodine at high pressure

SOURCE: AN SSSR. Doklady, v. 172, 2, 1967, 313-316

TOPIC TAGS: x ray diffraction study, iodine, high pressure research, crystal lattice structure, molecular crystal

ABSTRACT: The tests on iodine were made because at high pressure it is one of the few elements having a molecular structure, and may be the only element in which structure investigations can be made at room temperature. The authors carried out an x-ray diffraction study of its structure at room temperature and pressures up to 60 kbar, using a procedure described earlier (DAN v. 151, 1068, 1963) and molybdenum radiation. To improve the diffraction pattern, the iodine was tested in powdered form. The observed appearance and disappearance of several lines is reported, as well as coalescence of some lines with variation of pressure. In addition, the pressure dependence of the volume of the iodine and of the parameters of its lattice structure are plotted. The results indicate that pressure does not change the initial rhombic structure, merely distorting it and leading to some rotation of the molecules. It is

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UDC: 539.89